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About Penile Cancer

Get an overview of penile cancer and the latest key statistics in the US.

Overview and Types

If you've been diagnosed with penile cancer or are worried about it, you likely have a lot of questions. Learning some basics is a good place to start.

What Is Penile Cancer?

Research and Statistics

See the latest estimates for new cases of penile cancer and deaths in the US and what research is currently being done.

- Key Statistics for Penile Cancer
- What's New in Penile Cancer Research?

What Is Penile Cancer?

- About the penis
- Benign conditions of the penis
- Cancers of the penis

Penile cancer starts in or on the penis. Cancer starts when cells begin to grow out of control. Cells in nearly any part of the body can become cancer, and can spread to other parts of the body. To learn more about how cancers start and spread, see What Is Cancer?

About the penis

The penis is the external male sex organ. It's also part of the urinary system. It's made up of many types of body tissues, including skin, nerves, smooth muscle, and blood vessels.

The main part of the penis is known as the **shaft**, and the head of the penis is called the **glans**. At birth, the glans is covered by a piece of skin called the **foreskin**, or prepuce.

The foreskin is often removed in infant boys in an operation called a **circumcision**.

Inside the penis are 3 chambers that contain a soft, spongy network of blood vessels. Two of these cylinder-shaped chambers, known as the **corpora cavernosa**, are on either side of the upper part of the penis. The third chamber is below them and is known as the **corpus spongiosum**. This chamber widens at its end to form the glans. The corpus spongiosum surrounds the **urethra**, a thin tube thatstarts at the bladder andruns through the penis. Urine and semen travel through the urethra and leave the body through an opening in the glans of the penis, called the **meatus**.



To get an erection, nerves signal a man's body to store blood in the vessels inside the corpora cavernosa. As blood fills the chambers, the spongy tissue expands and the penis stiffens and gets longer. During ejaculation, semen (which contains sperm cells

and fluids) flows through the urethra and out of the body through the meatus. After ejaculation, the blood flows back into the body, and the penis becomes soft again.

Benign conditions of the penis

Sometimes, growths can develop on the penis that are abnormal but are not cancers. (They are benign.) These lesions often look like warts or irritated patches of skin. Like penile cancer, they're most often found on the glans or on the foreskin, but they can also occur along the shaft of the penis.

Condylomas (genital warts)

These growths tend to look like tiny cauliflowers. Some are so small that they can only be seen with a magnifying lens. Others may be as large as an inch or more across. Condylomas are caused by infection with <u>certain types of human papillomavirus (HPV)</u>².

Bowenoid papulosis

This condition is also linked to infection with HPV and tends to occur in younger, sexually active men. It's seen as small, red or brown spots or patches on the shaft of the penis. These may look like genital warts, but when looked at under a microscope, dysplastic (abnormal) cells are seen in the surface layer of the penile skin.

Bowenoid papulosis can also be mistaken for an early-stage cancer called **carcinoma in situ** (CIS), also known as **Bowen disease** (described below). Usually bowenoid papulosis doesn't cause any problems, and it can even go away on its own after a few months. But if it doesn't go away and isn't treated, in rare cases it can progress to Bowen disease.

Cancers of the penis

Each type of tissue in the penis contains several types of cells. Different types of penile cancer can start from these cells. The differences are important because they determine the seriousness of the cancer and the type of treatment needed.

Almost all penile cancers start in skin cells of the penis.

Squamous cell carcinoma

About 95% of penile cancers start in flat skin cells called **squamous cells**. Squamous

cell carcinoma (also known as squamous cell cancer) can start anywhere on the penis. Most of these cancers start on the foreskin (in men who have not been circumcised) or on the glans. These tumors tend to grow slowly. If they're found at an early stage, they can usually be cured.

Verrucous carcinoma:A verrucous carcinoma growing on the penis is also known as Buschke-Lowenstein tumor. This is an uncommon form of squamous cell cancer that can start in the skin in many areas. This cancer looks a lot like a large genital wart. Verrucous carcinomas tend to grow slowly but can sometimes get very large. They can grow deep into nearby tissue, but they rarely spread to other parts of the body.

Carcinoma in situ (CIS): This is the earliest stage of squamous cell cancer of the penis. In this stage, the cancer cells are found only in the top layers of skin. They have not yet grown into the deeper tissues. Depending on where the CIS is on the penis, doctors may use other names for the disease.

- CIS of the glans is sometimes called erythroplasia of Queyrat.
- CIS on the shaft of the penis (or other parts of the genitals) is called **Bowen** disease.

Melanoma

Melanoma is a type of skin cancer that starts in melanocytes, the cells that make the brownish color in the skin that helps protect it from the sun. These cancers tend to grow and spread quickly. They're more dangerous than the more common basal and squamous cell types of skin cancer. Melanomas are most often found in sun-exposed skin, but rarely they occur in other places like the penis. Only a very small portion of penile cancers are melanomas. For more information about melanoma and its treatment, ut mele disease. 0 0 4 0 0 rgatme1 Tf 0 0 0SsaT8u 0 0 00 0s8urmatiou 0 1 72 3Qnd in sun-

Adenoc____TeoThePaget disease of the penis)

Sarcoma

A small number of penile cancers are sarcomas. These cancers develop from blood vessels, smooth muscle, or other connective tissue cells of the penis. For more about this type of cancer, see <u>Soft Tissue Sarcoma</u>⁴.

Hyperlinks

- 1. www.cancer.org/cancer/understanding-cancer/what-is-cancer.html
- 2. www.cancer.org/cancer/risk-prevention/hpv.html
- 3. www.cancer.org/cancer/types/melanoma-skin-cancer.html
- 4. www.cancer.org/cancer/types/soft-tissue-sarcoma.html
- 5. www.cancer.org/cancer/types/penile-cancer/references.html

References

See all references for Penile Cancer

American Society of Clinical Oncology. Penile Cancer: Introduction. 8/2017. Accessed at www.cancer.net/cancer-types/penile-cancer/introduction on May 24, 2018.

Cancer Research UK. About penile cancer. 10 Mar 2016. Accessed at www.cancerresearchuk.org/about-cancer/penile-cancer on May 24, 2018.

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Key Statistics for Penile Cancer

The American Cancer Society estimates for penile cancer in the United States for 2024 are:

- About 2,100 new cases of penile cancer diagnosed
- About 500 deaths from penile cancer

For statistics related to survival, see Survival Rates for Penile Cancer¹.

Penile cancer is rare in North America and Europe. It's diagnosed in fewer than 1 man in 100,000 each year and accounts for fewer than 1% of cancers in men in the United States. Penile cancer is much more common in some parts of Asia, Africa, and South America.

Visit the American Cancer Society's Cancer Statistics Center² for more key statistics.

Hyperlinks

- 1. <u>www.cancer.org/cancer/types/penile-cancer/detection-diagnosis-staging/survival-rates.html</u>
- 2. cancerstatisticscenter.cancer.org/
- 3. www.cancer.org/cancer/types/penile-cancer/references.html

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American Cancer Society. *Cancer Facts & Figures 2024*. Atlanta: American Cancer Society; 2024.

See all references for Penile Cancer

Last Revised: January 17, 2024

What's New in Penile Cancer Research?

- Drugs to treat penile cancer
- Treating lymph nodes

Penile cancer is rare in this country, so it's hard to study. Still, research on penile cancer

is being done in many university hospitals, medical centers, and other institutions around the world. Most experts agree that treatment in a clinical trial should be considered for any type or stage of penile cancer. This way men can get the best treatment available now and may also get the new treatments that are thought to be even better. The new and promising treatments discussed here are only available in clinical trials.

Drugs to treat penile cancer

Doctors are also looking at different chemotherapy drugs to treat penile cancer, especially later-stage cancers and those that don't respond to or <u>come back</u>¹ after treatment.

Learning more about the gene changes linked to penile cancer might help guide use of targeted therapies. Targeted therapy² is a term used for drugs that target certain cell changes and signals that are needed for a cancer to develop and keep growing. Targeted therapies might sometimes work when standard chemo drugs don't, and they tend to have different (and often less severe) side effects from most standard chemo drugs.

But it's not yet clear how useful these or other targeted drugs might be for penile cancer. Early results suggest some benefit, but more research is needed.

Treating lymph nodes

At this time, there's no known best way to treat penile cancer that has spread to nearby lymph.nodes³. International studies are looking at how to best combine surgery, radiation, and chemo, as well as the best order in which to use these treatments.

Another research interest is finding good ways to find even tiny bits of cancer in the lymph nodes. Studies are looking at <u>imaging tests</u>⁴ like PET scans, MRIs, and ultrasound to find affected nodes. This would help direct treatment and potentially improve treatment outcomes.

Hyperlinks

1. www.cancer.org/cancer/survivorship/long-term-health-concerns/recurrence.html

- 2. www.cancer.org/cancer/managing-cancer/treatment-types/targeted-therapy.html
- 3. www.cancer.org/cancer/diagnosis-staging/lymph-nodes-and-cancer.html
- 4. <u>www.cancer.org/cancer/diagnosis-staging/tests/imaging-tests/imaging-radiology-tests-for-cancer.html</u>
- 5. www.cancer.org/cancer/types/penile-cancer/references.html

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